

REMARKS

The Office Action mailed April 26, 2007 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-21 are now pending in this application. Claims 1-21 stand rejected. Claims 6 and 10 stand objected to.

The objections to Claims 6 and 10 due to informalities are respectfully traversed. The Examiner asserts on page 2 of the Office Action that the recitation of Claim 6 of “providing a CPU configured for a PLC” is redundant. Applicants respectfully traverse this assertion. Claim 6 depends from Claim 1, which includes a recitation of “providing a central processing unit (CPU) configured for a programmable logic controller (PLC).” The recitations of Claim 6 further limit Claim 1 to require the CPU to be configured for a PLC including a Network Interface Unit.

Additionally, Applicants respectfully traverse the objection to Claim 10. The recitation of Claim 10 objected to in the Office Action has been deleted. Claim 9 has been amended to include this recitation, including the amendment as suggested by the Examiner.

For at least the reasons set forth above, Applicants request that the objections to Claims 6 and 10 be withdrawn.

The rejection of Claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over Applicants’ Admitted Prior Art (hereinafter referred to as “AAPA”) in view of U.S. Patent 6,636,749 to Holmes et al. (hereinafter referred to as “Holmes”) is respectfully traversed.

AAPA describes a programmable logic controller (PLC) wireless communication system (10) including a backplane (12) and a central processing unit (CPU) card (14) mounted thereon. A CPU is mounted on the CPU card (14). Backplane (12) includes a plurality of module connectors (16) which accept modules such as a wireless communication module (18). Module connectors (16) communicate with the CPU via a PLC module bus. During normal operation, the CPU sends information to be wirelessly communicated across

the PLC module bus to wireless communication module (18). Additionally, information that is received by wireless communication module (18) is sent by wireless communication module (18) across the PLC module bus to the CPU.

Holmes describes a device (128) for allowing a wireless phone (110) to acquire wireless protocol capability and electrical power from a single attachment within a vehicle (102). A vehicle adapter (104) includes a wireless communication device, such as a Bluetooth module (106), for communicating between device (128) and a Bluetooth device (126) operably connected to and located within the vehicle (102). The vehicle adapter (104) is connected to a main cord (108) including components to transmit power from the vehicle adapter (104) to the wireless phone (110) and to transmit audio signals back and forth between the vehicle adapter (104) and the wireless phone (110). During operation, audio signals are transmitted between the wireless phone (110) and vehicle adapter (104) using the main cord (108). The Bluetooth module (106) then translates and communicates the audio signals to the Bluetooth device (126) connected to the vehicle (102).

Claim 1 recites a method for manufacturing, wherein the method includes “providing a central processing unit (CPU) configured for a programmable logic controller (PLC) including a PLC module bus for coupling at least one PLC module to the CPU; providing a means for wireless radio frequency communications; and operationally coupling the means for wireless radio frequency communications to the CPU, wherein the CPU is mounted on a backplane of a rack, wherein the means and the CPU communicate without using the PLC module bus.”

Neither AAPA nor Holmes, considered alone or in combination, describes or suggests a method for manufacturing, as recited in Claim 1. More specifically, neither AAPA nor Holmes, considered alone or in combination, describes or suggests operationally coupling a means for wireless radio frequency communications to a CPU, wherein the CPU is mounted on a backplane of a rack, and wherein the means and the CPU communicate without using a PLC module bus. Rather, in contrast to the present invention, AAPA describes a CPU and a wireless communication module that communicate across a PLC module bus. Holmes describes a device for allowing a wireless phone to acquire wireless protocol capability and

electrical power from a single attachment within a vehicle. Audio signals are transmitted between the wireless phone and a vehicle adapter using a main cord and are then translated and communicated by a Bluetooth module of the device to a Bluetooth device connected to the vehicle.

Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over AAPA in view of Holmes.

Claims 2-6 depend directly from independent Claim 1. When the recitations of Claims 2-6 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-6 likewise are patentable over AAPA in view of Holmes.

Claim 7 recites a method for communicating, wherein the method includes “providing a wireless communication device; sending a wireless message from the wireless communication device to a programmable logic controller (PLC) having a central processing unit (CPU) and a PLC module bus for coupling at least one PLC module to the CPU; and operationally coupling a means for wireless radio frequency communications to the CPU, wherein the CPU is mounted on a backplane of a rack, wherein the means for wireless radio frequency communications and the CPU communicate without using the PLC module bus.”

Neither AAPA nor Holmes, considered alone or in combination, describes or suggests a method for communicating, as recited in Claim 7. More specifically, neither AAPA nor Holmes, considered alone or in combination, describes or suggests operationally coupling a means for wireless radio frequency communications to a CPU, wherein the CPU is mounted on a backplane of a rack, and wherein the means for wireless radio frequency communications and the CPU communicate without using a PLC module bus. Rather, in contrast to the present invention, AAPA describes a CPU and a wireless communication module that communicate across a PLC module bus. Holmes describes a device for allowing a wireless phone to acquire wireless protocol capability and electrical power from a single attachment within a vehicle. Audio signals are transmitted between the wireless phone and a vehicle adapter using a main cord and are then translated and communicated by a Bluetooth module of the device to a Bluetooth device connected to the vehicle.

Accordingly, for at least the reasons set forth above, Claim 7 is submitted to be patentable over AAPA in view of Holmes.

Claim 8 depends directly from independent Claim 7. When the recitations of Claim 8 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claim 8 likewise is patentable over AAPA in view of Holmes.

Claim 9 recites a Programmable Logic Controller including “a backplane comprising at least one module connector and a module bus; a central processing unit (CPU) card mounted on said backplane; and a transmitter/receiver mounted on said CPU card, said transmitter/receiver operationally coupled to said CPU to communicate therebetween without using said module bus, wherein said CPU is mounted on said backplane via said CPU card.”

Neither AAPA nor Holmes, considered alone or in combination, describes or suggests a Programmable Logic Controller, as recited in Claim 9. More specifically, neither AAPA nor Holmes, considered alone or in combination, describes or suggests a transmitter/receiver mounted on the CPU card, the transmitter/receiver operationally coupled to the CPU to communicate therebetween without using the module bus. Rather, in contrast to the present invention, AAPA describes a CPU and a wireless communication module that communicate across a PLC module bus. Holmes describes a device for allowing a wireless phone to acquire wireless protocol capability and electrical power from a single attachment within a vehicle. Audio signals are transmitted between the wireless phone and a vehicle adapter using a main cord and are then translated and communicated by a Bluetooth module of the device to a Bluetooth device connected to the vehicle.

Accordingly, for at least the reasons set forth above, Claim 9 is submitted to be patentable over AAPA in view of Holmes.

Claims 10-14 and 21 depend directly from independent Claim 9. When the recitations of Claims 10-14 and 21 are considered in combination with the recitations of Claim 9, Applicants submit that dependent Claims 10-14 and 21 likewise are patentable over AAPA in view of Holmes.

Claim 15 recites an apparatus including “a processor; a radio frequency receiver operationally coupled to said processor; a radio frequency transmitter operationally coupled to said processor, said transmitter is configured to send a wireless message to a programmable logic controller (PLC) having a central processing unit (CPU) and a PLC module bus for coupling at least one PLC module to the CPU; and means for wireless radio frequency communications operationally coupled to the CPU, wherein the CPU is mounted on a backplane of a rack, wherein the means and the CPU communicate without using the PLC module bus.”

Neither AAPA nor Holmes, considered alone or in combination, describes or suggests an apparatus, as recited in Claim 15. More specifically, neither AAPA nor Holmes, considered alone or in combination, describes or suggests a means for wireless radio frequency communications operationally coupled to a CPU, wherein the CPU is mounted on a backplane of a rack, and wherein the means and the CPU communicate without using a PLC module bus. Rather, in contrast to the present invention, AAPA describes a CPU and a wireless communication module that communicate across a PLC module bus. Holmes describes a device for allowing a wireless phone to acquire wireless protocol capability and electrical power from a single attachment within a vehicle. Audio signals are transmitted between the wireless phone and a vehicle adapter using a main cord and are then translated and communicated by a Bluetooth module of the device to a Bluetooth device connected to the vehicle.

Accordingly, for at least the reasons set forth above, Claim 15 is submitted to be patentable over AAPA in view of Holmes.

Claims 16-20 depend directly from independent Claim 15. When the recitations of Claims 16-20 are considered in combination with the recitations of Claim 15, Applicants submit that dependent Claims 16-20 likewise are patentable over AAPA in view of Holmes.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-21 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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